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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,132	01/19/2001	Izumi Fukuda	72764{SC159501}	9483

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EXAMINER

NGUYEN, PHU K

ART UNIT PAPER NUMBER

2673

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/766,132

Applicant(s)

IZUMI FUKUDA

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-6 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,5,9 and 12 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,10,11 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.


### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
PHU K. NGUYEN  
PRIMARY EXAMINER  
GROUP 2300

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/3/2005

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 5, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over ENDO et al. (6,654,014) in view of YANO et al. (EP 0 859 338).

As per claim 2, Endo teaches the claimed "entertainment apparatus which displays a moving picture on a display screen of a display device, the moving picture being obtained by photographing an object moving in a virtual three dimensional field, according to manipulation contents of a manipulator received via a controller" (Endo, column 14, line 59 to column 15, line 9), comprising: "object position calculating means for sequentially calculating a position and a moving direction of said object in said three dimensional field" (Endo, column 15, lines 5-7); and "setup means for determining a setup point in said three dimensional field every time the position and moving direction of said object are calculated by said object position calculating means, while taking a setup point obtained at least in the last calculation into consideration" (Endo, column 17, lines 26-42). It is noted that Endo does not teach the view is set up "by the use of a virtual camera". However, Yano teaches that such virtual camera is equivalent to the image taken from a view point as in Endo's case (Yano, page 7, lines 57-58).

Furthermore, Yano teaches the set up position of the camera as claimed "means for

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settling a camera chasing point at a position higher by a predetermined value H than a position to the rear of said object from the position thereof by a distance K, the position being on a line which passes through a newly calculated position of said object by said object position calculating means and is parallel with a newly calculated moving direction of said object" (Yano, the relative distance between viewpoint and object; page 9, line 58 to page 10, line 3; page 11, lines 1-5) , and "wherein said camera setup means settles a setup point of said virtual camera at a position approaching said camera chasing point from the setup point of said virtual camera obtained at least in the last calculation" (Yano, page 9, lines 12-15). It would have been obvious to define a virtual camera at the view point and provide the distance calculation based on the object and viewpoint relative position because it provides the perspective projection of the flying object on the moving viewpoint of the virtual camera (Yano, page 9, lines 2-19).

As per claim 5, Endo teaches the claimed "entertainment apparatus which displays a moving picture on a display screen of a display device, the moving picture being obtained by photographing an object moving in a virtual three dimensional field, according to manipulation contents of a manipulator received via a controller" (Endo, column 14, line 59 to column 15, line 9), comprising: "object position calculating means for sequentially calculating a position and a moving direction of said object in said three dimensional field" (Endo, column 15, lines 5-7); and "setup means for determining a setup point in said three dimensional field every time the position and moving direction of said object are calculated by said object position calculating means, while taking a setup point obtained at least in the last calculation into consideration" (Endo, column 17,

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lines 26-42). It is noted that Endo does not teach the view is set up "by the use of a virtual camera". However, Yano teaches that such virtual camera is equivalent to the image taken from a view point as in Endo's case (Yano, page 7, lines 57-58).

Furthermore, Yano teaches the set up position of the camera as claimed "means for settling a camera reference point at a position in front of the position of the object by a distance J, the position being on a line passing through a newly calculated position of said object by said object position calculating means, and the line being parallel with a newly calculated moving direction of said object" (Yano, the relative distance between viewpoint and object; page 9, line 58 to page 10, line 3; page 11, lines 1-5) , and "wherein said camera setup means settles a sight line direction of the virtual camera so that said virtual camera is pointed at said camera reference point" (Yano, page 7, line 52 to page 8, line 2, lines 14-24). It would have been obvious to define a virtual camera at the view point and provide the distance calculation based on the object and viewpoint relative position because it provides the perspective projection of the flying object on the moving viewpoint of the virtual camera (Yano, page 9, lines 2-19).

Claim 9 claims "a storage medium storing a program which is read out and executed by a computer" (Endo, column 7, lines 14-124), said program being read out and executed by said computer to realize means on said computer, performing the functions of the system of claim 2; therefore, it is rejected under the same reason.

Claim 12 claims "a storage medium storing a program which is read out and executed by a computer" (Endo, column 7, lines 14-124), said program being read out

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and executed by said computer to realize means on said computer, performing the functions of the system of claim 5; therefore, it is rejected under the same reason.

Claims 3-4, 6, 10-11, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, bipin Shalwala can be reached on (571) 272 7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu K. Nguyen  
May 30, 2005

  
PHU K. NGUYEN  
PRIMARY EXAMINER  
GROUP 2300